WHAT IS CLAIMED IS:

1. An image sensor comprising:

an image sensing portion having a plurality of solid state photosensing devices for converting light into an electric signal,

drive potential supply means for supplying a drive potential of the solid state photosensing devices,

amplifying means for receiving the electric signal and amplifying the electric signal with a variable gain, and

controlling means for controlling the gain of the amplifying means,

wherein the amplifying means changes the gain according to a reset signal produced by the solid state photosensing device in a state in which no light is substantially incident.

2. An image sensor as set forth in Claim 1, wherein the drive potential supply means supplies two switchable levels of drive potentials and the amplifying means changes the gain according to two different reset signals which are produced by the solid state photosensing devices on driving at the two levels of drive potentials.

3. An image sensor as set forth in Claim 1, wherein the amplifying means has a linear input-output relation.

4. An image sensor as set forth in Claim 2, wherein the amplifying means has a non-linear input-output relation.

5. An image sensor as set forth in Claim 1, wherein the amplifying means produces an output of the electric signal in digital format.

6. An image sensor as set forth in Claims 1, further comprising storing means for storing a reset signal produced by each of the solid state photosensing devices, wherein the amplifying means changes the gain according to the stored reset signal.

7. An image sensor as set forth in Claim 1, wherein the solid state photosensing devices produce an output of the electric signal in the non-linear relation with respect to the quantity of incident light.